

Notice of Allowability

Application No.

09/855,595

Examiner

Curtis B. Odom

Applicant(s)

DOOLEY ET AL.

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt filed on 11/1/2004.
2. ☒ The allowed claim(s) is/are 1-5, 7-27, 30-33, 35-41, 44-47, 49, and 51, which have been renumbered claims 1-43, respectively.
3. ☒ The drawings filed on 11/1/2004 and 5/15/2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Aaron Waxler on February 3, 2005.

The application has been amended as follows:

Claim 4 (currently amended). A method according to claim 2, wherein a correlation output is provided as a function of a sum of correlation values returned for a series of individual, continuous correlations.

Claim 17 (currently amended). A method according to claim 16, wherein the data message information relating to the timing of an epoch of at least one data bit of the target signal is derived from the timing of an epoch of at least one data bit of a reference signal.

Claim 19 (currently amended). A method according to claim 16, wherein a dwell time for each code check made whilst attempting to acquire the target signal is greater than that previously used to acquire a reference signal.

Claim 20 (currently amended) A method according to claim 16, wherein the data message information further comprises data bit information relating to at least part of the data message of the target signal which is derived from corresponding data bit information of a reference signal.

Claim 32 (currently amended). A mobile unit according to claim 31, wherein a correlation output is provided as a function of a sum of correlation values returned for a series of individual, continuous correlations.

Claim 37 (currently amended). A mobile unit according to claim 36, wherein the data message information relating to the timing of an epoch of at least one data bit of the target signal is derived from the timing of an epoch of at least one data bit of a reference signal.

Claim 39 (currently amended). A mobile unit according to claim 36, wherein a dwell time for each code check made whilst attempting to acquire the target signal is greater than that previously used to acquire a reference signal.

Claim 40 (currently amended) A mobile unit according to claim 36, wherein the data message information further comprises data bit information relating to at least part of the data message of the target signal which is derived from corresponding data bit information of a reference signal.

EXAMINER'S STATEMENTS OF REASONS FOR ALLOWANCE

2. Claims 1-5, 7-27, 30-33, 35-41, 44-47, 49, and 51, which have been renumbered claims 1-43, respectively, are allowable over prior art because related references do not disclose providing data message information from the base station to a receiver including the timing of an epoch, wherein the data message is used to minimize degradation of a correlation of an input signal and PRN code, wherein the degradation is caused by variations in the PRN code attributable to modulation by the data message. Prior art references normally minimize the degradation at the receiver by the use of some type of error correction. However, by supplying the data message, there is no need for this error correction to be performed at the receiver.

Conclusion


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Curtis Odom
February 4, 2005



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